UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3188

WATER DIVISION

Reply to
Attn of: WD 19-C04

MAY 2 2 2019

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Daniel Redline
Regional Administrator
Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814

Re: Public Notice of NPDES Draft Permit No. ID0021997 for City of Harrison Wastewater Treatment Plant

Dear Mr. Redline:

Enclosed for your information is a copy of a draft National Pollutant Discharge Elimination System (NPDES) permit for the City of Harrison Wastewater Treatment Plant, which we propose to modify. In addition, we have also enclosed the Fact Sheet which outlines the basis for the permit.

Technical questions regarding the permit may be referred to Jenny Wu at (206) 553-6328 or 1-800-424-4372 ext. 6328 or via email at Wu.Jennifer@epa.gov.

Sincerely,

Susan Poulsom

Susan Poulsom, Manager
NPDES Permits Section

Enclosures

cc: Thomas Herron, IDEQ Coeur d'Alene Regional Office (via email)
Loren Moore, IDEQ (via email)

Fact Sheet for Re-proposal of 5-Day Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) Percent Removal Effluent Limits

**The U.S. Environmental Protection Agency (EPA)
Proposes to Modify a National Pollutant Discharge Elimination System (NPDES) Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act (CWA) to:**

City of Harrison
Wastewater Treatment Plant

Public Comment Start Date: May 22, 2019
Public Comment Expiration Date: June 22, 2019

Technical Contact: Jennifer Wu
206-553-6328
800-424-4372, ext. 6328 (within Alaska, Idaho, Oregon and Washington)
Wu.Jennifer@epa.gov

The EPA Proposes to Modify the NPDES Permit
The EPA proposes to modify the NPDES permit for the facility referenced above. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the United States. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from the facility.

This Fact Sheet includes:
- information on public comment, public hearing, and appeal procedures
- a listing of proposed effluent limitations and other conditions for the facility
- a map and description of the discharge location
- technical material supporting the conditions in the permit

State Certification
The EPA requested a draft certification of the permit for this facility under Section 401 of the Clean Water Act from Idaho Department of Environmental Quality (IDEQ) on May 16, 2019. The EPA requested the draft certification, though the proposed permit is the same as the current effective permit, and IDEQ had provided final certification of that permit under Section 401 of the Clean Water Act.

IDEQ replied to the EPA that they do not believe a revised certification is necessary for this draft permit, because the permit limits have not changed, nor are there changes to the permit as a result of the remand that would change the nature of IDEQ's antidegradation analysis.

Public Comment

This fact sheet supports the EPA decision to public notice a new draft permit, which addresses the numeric effluent limits and percent removal requirements for BOD_5 and TSS. The EPA withdrew those limits from the final permit for this facility that the EPA issued on June 25, 2018 and that became effective on September 1, 2018. On August 14, 2018, following a petition to review the final permit filed with the EPA's Environmental Appeals Board, the EPA stayed the percent removal effluent limits for BOD_5 and TSS pursuant to 40 C.F.R. § 124.16(a)(2). Although the petition also raised concerns with the permit effluent limits for TSS concentration based on treatment equivalent to secondary treatment, the EPA did not stay these effluent limits because they were identical to the limits in the previous permit and were not directly contested or part of the relief sought by the petition.

The EPA is re-proposing the percent removal effluent limits for BOD_5 and TSS to provide opportunity for public comment on the technical justification supporting these limits and is re-proposing the effluent limit for TSS concentration based on treatment equivalent to secondary treatment with additional technical justification.

This fact sheet explains the rationale for allowing limits higher than required by the secondary treatment standards for TSS concentration limits and lower than required for TSS and BOD_5 percent removals limits. All other portions of the permit are unchanged from the current permit in effect. During this public comment period, the EPA is only accepting comments on these two provisions. See 40 CFR 124.19(j).

Persons wishing to comment on and/or request a Public Hearing for the draft permit must do so in writing by the expiration date of the Public Comment period. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for a Public Hearing must be in writing and should be submitted to the EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, and all comments have been considered, the EPA's Region 10 Director for the Water Division will make a final decision regarding the permit modification. Since this draft permit is the same as the currently issued permit, the effective date and expiration date of the currently issued permit will remain unchanged. The permit conditions that were stayed in the current permit will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR 124.19.

Documents are Available for Review

The draft NPDES permit and related documents can be reviewed or obtained by visiting or contacting the EPA's Region 10 Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday at the address below. The draft permit, fact sheet, and other information are

available online at Region 10 NPDES website at https://www.epa.gov/npdes-permits/about-region-10s-npdes-permit-program.

U.S. EPA Region 10
1200 Sixth Avenue, Suite 155, MS: 19-C04
Seattle, Washington 98101

(206) 553-0523 or
Toll Free 1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The fact sheet and draft permits are also available at:

EPA Idaho Operations Office
950 West Bannock Street, Suite 900
Boise, Idaho 83702

Idaho DEQ Boise Regional Office
1445 North Orchard Street
Boise, Idaho 83706

Idaho DEQ Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814

List of Tables

Acronyms

AML	Average Monthly Limit
AWL	Average Weekly Limit
BAT	Best Available Technology economically achievable
BCT	Best Conventional pollutant control Technology
BOD_5	Biochemical oxygen demand, five-day
BMP	Best Management Practices
°C	Degrees Celsius
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CV	Coefficient of Variation
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
Gpd	Gallons per day
HUC	Hydrologic Unit Code
ICIS	Integrated Compliance Information System
IDEQ	Idaho Department of Environmental Quality
I/I	Infiltration and Inflow
lbs/day	Pounds per day
LTA	Long Term Average
mg/L	Milligrams per liter
Ml	Milliliters
ML	Minimum Level
µg/L	Micrograms per liter
mgd	Million gallons per day
MDL	Maximum Daily Limit or Method Detection Limit
N	Nitrogen

NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and maintenance
POTW	Publicly owned treatment works
QAP	Quality assurance plan
RP	Reasonable Potential
RWC	Receiving Water Concentration
SIC	Standard Industrial Classification
SS	Suspended Solids
s.u.	Standard Units
TMDL	Total Maximum Daily Load
TSD	Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001)
TSS	Total suspended solids
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UV	Ultraviolet
WD	Water Division
WQBEL	Water quality-based effluent limit
WQS	Water Quality Standards
WWTP	Wastewater treatment plant

I. Background Information

A. General Information

This fact sheet provides information on the draft NPDES permit for the following entity:

Table 1. General Facility Information

NPDES Permit #:	ID0021997
Applicant:	City of Harrison Wastewater Treatment Plant
Type of Ownership:	Publicly Owned Treatment Works (POTW)
Physical Address:	2144 East Park Avenue Harrison, Idaho 83833
Mailing Address:	P.O. Box 73 Harrison, Idaho 83833
Facility Contact:	Wes Rice Public Works Supervisor publicworks@cityofharrison.org
Facility Location:	Latitude 47° 27' 31" N Longitude 116° 46' 08" N
Receiving Water	Anderson Slough
Facility Outfall	Latitude 47° 27' 31" N Longitude: 116° 46' 06" W

B. Permit History

The most recent NPDES permit for the City of Harrison (Harrison) was issued on June 28, 2018, became effect on September 1, 2018 and will expire on August 31, 2023.

On July 25, 2018, the Idaho Conservation League (ICL) filed a petition for review of the permit with the EPA's Environmental Appeals Board (EAB).[1]

On October 10, 2018, the EPA provided notice to the EAB and ICL that it was withdrawing the permit's percent removal effluent limits for BOD_5 and TSS because the EPA did not provide for public comment on the final percent removal effluent limits, which were less stringent than those proposed in the draft permit.[2] Although the petition also raised concerns with the permit effluent limits for TSS concentration based on treatment equivalent to secondary treatment, the EPA did not stay these effluent limits because they were identical to the limits in the previous permit and were not directly contested or part of the relief sought

[1] Idaho Conservation League, Petition NPDES Permit No. ID0021997 City of Harrison Wastewater Treatment Plant, July 25, 2018.
[2] Environmental Appeals Board, Order Dismissing Petition for Review, Oct. 11, 2018, https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/be414b880a9b2b0e85258090006045b4/789ecbda6f9c30be852583230065afc2!OpenDocument.

by the petition. However, the EPA determined that the previous fact sheet did not explain the basis for allowing treatment equivalent to secondary treatment for TSS. The EAB notice stated that the EPA would prepare a new draft permit addressing the withdrawn portions of the permit. The remaining uncontested portions of the permit remain in effect. See 40 CFR 124.19(j).

This fact sheet supports the draft permit, which addresses the percent removal limits for BOD_5 and TSS, and the TSS numeric effluent limits.

C. Tribal Consultation

The Coeur d'Alene Tribe Reservation is located approximately 1.5 miles south of the City of Harrison. The EPA communicated with the Coeur d'Alene Tribe during the development of this permit and sent a letter inviting tribal consultation to the Coeur d'Alene Tribe in May 2019. The Coeur d'Alene Tribe has water quality standards that have been approved under 303(c) of the Clean Water Act.

II. Idaho NPDES Authorization

On June 5, 2018, the EPA approved Idaho's application to administer and enforce the Idaho Pollutant Discharge Elimination System (IPDES) program. IDEQ will be taking the IPDES program in phases over a four-year period in accordance with the Memorandum of Agreement (MOA) between IDEQ and the EPA, and subject to the EPA oversight and enforcement. Authority to issue POTW permits transferred to the State of Idaho on July 1, 2018.

The EPA reissued the City of Harrison WWTP permit on June 28, 2018 just prior to the transfer of NPDES authority to Idaho on July 1, 2018. After ICL appealed the permit on July 25, 2018, the EPA requested and was granted a remand on the appeal; therefore, the EPA retained authority for this permit until resolution of the appeal and reissuance of the modified permit.

Upon transfer of the permit to IDEQ, all documentation required by the permit will be sent to IDEQ rather than to the EPA and any decision under the permit to be made by the EPA or jointly between the EPA and IDEQ will be made solely by IDEQ. Permittees will be notified by IDEQ when this transition occurs.

III. Facility Information and Receiving Water

The fact sheet dated May 11, 2018 provides information on the facility and the receiving water. Appendix A includes an aerial photo and schematic of the facility's operations.

IV. Effluent Limitations and Monitoring

This fact sheet addresses the justification for BOD_5 and TSS percent removal requirements, and TSS concentration limits based on treatment equivalent to secondary treatment. This fact sheet provides additional information about the basis and rationale for those decisions. Public notice of the revisions provides for the opportunity for the public to comment.

The EPA did not reconsider any other effluent limits or permit conditions for this facility; therefore, the basis for those permit provisions remains as described in the record supporting

the previously issued permit. See also the fact sheet dated May 11, 2018 and the *Response to Comments on the Draft NPDES Permit for the City of Harrison* dated June 25, 2018, (Permit Response to Comments) (EPA 2018).[3]

A. Treatment Equivalent to Secondary Treatment

40 CFR 133.105 provides the effluent limits associated with equivalent to secondary treatment requirements. Regulations under Part 133 and the EPA's NPDES Permit Writers' Manual provide the basis for whether effluent limits less stringent than the secondary treatment requirement limits for BOD_5 and TSS may be allowed. The regulations and manual describe three criteria that must be met for a facility to be eligible for treatment equivalent to secondary treatment limits:[4]

Criterion #1 - Consistently Exceeds Secondary Treatment Standards
The first criterion that must be satisfied to qualify for the equivalent to secondary standards is demonstrating that the BOD_5 and TSS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works exceed the secondary treatment standards set forth in §133.102(a) and (b). The regulations at §133.101(f) define "effluent concentrations consistently achievable through proper operation and maintenance"

- (f)(1): For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least 2 years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions.
- (f)(2): A 7-day average value equal to 1.5 times the value derived under paragraph.

Criterion #2 - Principal Treatment Process
The second criterion that a facility must meet to be eligible for equivalent to secondary standards is that its principal treatment process must be a trickling filter or waste stabilization pond.

Criterion #3 - Provides Significant Biological Treatment
The third criterion for applying equivalent to secondary standards is that the treatment works provides significant biological treatment of municipal wastewater. The regulations at §133.101(k) define significant biological treatment as using an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of at least 65 percent removal of BOD_5.

The June 28, 2018 permit for Harrison WWTP carried forward the numeric limits for BOD_5 and TSS from the previous permit, which had determined that treatment equivalent to secondary treatment was appropriate for TSS, but not BOD_5. The EPA applied the criteria above to evaluate whether treatment equivalent to secondary criteria could be applied to

[3] EPA Region 10 NPDES Webpage, City of Harrison WWTP, https://www.epa.gov/npdes-permits/npdes-permit-city-harrison-wastewater-treatment-facility-idaho.
[4] EPA NPDES Permit Writers' Manual (2010), Page 5-3. https://www.epa.gov/sites/production/files/2015-09/documents/pwm_2010.pdf

BOD_5 and TSS. The Harrison WWTP meets the second criteria, since its primary treatment are two lagoons, or waste stabilization ponds. The May 11, 2018 fact sheet, Section III.A and Appendix A describes these lagoons and the complete treatment process at Harrison WWTP.

For the first and third criteria, the current permit used data from 2008 to July 2017, because the treatment plant experienced problems prior to 2008. This resulted in less treatment and higher effluent concentrations that are not representative of the operations. For the third criterion, the EPA calculated percent removals of the 30-day average BOD_5 and TSS from influent and used the 5th percentile of those values to determine if there was at least 65% removal of BOD_5 and TSS. This approach ensures that the percent removal is achieved the majority of time, since 95% of the other values are above the 5th percentile. The EPA also evaluated both BOD_5 and TSS percent removals to ensure that there was at least 65% removal for both pollutants, not just BOD_5.

Based on an evaluation of that data, TSS meets the three criteria for allowing treatment equivalent to secondary treatment. BOD_5 did not meet the first criterion, so is not eligible for treatment equivalent to secondary treatment. Table 2 below summarizes the results from the evaluation, which compares Harrison's WWTP data to the secondary treatment standards. Since more data were collected since the EPA issued the 2018 permit, the EPA also evaluated data from 2008-March 2019. This analysis yielded the same conclusions as shown in Table 3.

Table 2. Treatment Equivalent to Secondary Treatment Evaluation (2008-July 2017)*

Secondary Treatment Standard BOD5 and TSS monthly average= 30 mg/L	**Secondary Treatment Standard BOD5 and TSS weekly average= 45 mg/L**	
BOD_5; Monthly Average	**BOD_5; Weekly Average**	**BOD_5 30-day average % removal**
NO: 95th percentile = *27 mg/L* < 30 mg/L	NO: (95th percentile of monthly*1.5) = *43 mg/L* < 45 mg/L	YES: 5th percentile = *78%* > 65%
TSS; Monthly Average	**TSS; Weekly Average**	**TSS 30-day average % removal**
YES: 95th percentile = *38 mg/L* > 30 mg/L	YES: (95th percentile of monthly*1.5) = *57 mg/L* > 45 mg/L	YES: 5th percentile = *75%* > 65%
YES: Waste stabilization pond facilities are the primary treatment method.		

*Harrison WWTP data in italics and underlined

Table 3. Treatment Equivalent to Secondary Treatment Evaluation (2008-March 2019)*

Secondary Treatment Standard BOD5 and TSS monthly average= 30 mg/L	Secondary Treatment Standard BOD5 and TSS weekly average= 45 mg/L	
BOD_5; Monthly Average	**BOD_5; Weekly Average**	**BOD_5 30-day average % removal**
No: 95th percentile = *28 mg/L* < 30 mg/L	No: (95th percentile of monthly*1.5) = *44 mg/L* < 45 mg/L	Yes: 5th percentile = *77%* > 65%
TSS; Monthly Average	**TSS; Weekly Average**	**TSS 30-day average % removal**
Yes: 95th percentile = *35 mg/L* > 30 mg/L	Yes: (95th percentile of monthly*1.5) = *57 mg/L* > 45 mg/L	Yes: 5th percentile = *74%* > 65%
Yes: Waste stabilization pond facilities are the primary treatment method.		

*Harrison WWTP data in italics and underlined

Therefore, the permit applies the treatment equivalent to secondary treatment effluent limits for TSS and applies the technology-based effluent limits for BOD_5. Table 4 lists the basis and proposed effluent limits for BOD_5 and TSS in the permit.

Table 4. Proposed Effluent Limits for BOD_5 and TSS

	Monthly Average	Weekly Average	Basis
BOD_5	30 mg/L	45 mg/L	Technology-based effluent limits for secondary treatment (133.102(a)-(b))
TSS	45 mg/L	65 mg/L	Meets criteria for treatment equivalent to secondary treatment (133.105(b))

B. Percent Removal Requirements

As described in the *Response to Comments on the Draft NPDES Permit for the City of Harrison* dated June 25, 2018, 40 CFR 133.103(d) provides the basis for evaluating whether percent removals lower than 85 percent for BOD_5 and TSS may be allowed in a permit. 40 CFR 133.103(d)(1)-(3) describe three criteria the permittee must satisfactorily demonstrate:

1. The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater;
2. To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards; and
3. The less concentrated influent wastewater is not the result of excessive I/I.

The EPA applied the criteria to evaluate whether Harrison WWTP is eligible for BOD_5 and TSS percent removals lower than 85 percent. In the current permit, the EPA reviewed Harrison WWTP's DMR data from 2008 to July 2017 to evaluate 40 CFR 133.103(d)(1). Since more data have been collected since the 2018 permit issuance, the EPA also evaluated data from August 2017 to March 2019.

Table 5 shows the BOD_5 and TSS violations between 2008 and March 2019. Harrison WWTP complied with their monthly and weekly average effluent limits for BOD_5 consistently with some exceptions. For BOD_5, three out of 97 data points violated the BOD_5 monthly average limits, representing 3% of the BOD_5 monthly average effluent concentrations from 2008 to March 2019. One out of 97 data points violated the BOD_5 weekly average limit, representing 1% of the BOD_5 weekly average effluent concentrations from 2008 to March 2019.

For TSS, two out of 97 data points violated the monthly average TSS limit. These violations were also relatively small (46 mg/L, 48 mg/L) compared to the permit limit (45 mg/L). Violations of the TSS monthly average limit represent 2% of the TSS effluent concentrations from 2008 to March 2019. There were no violations of the TSS weekly average permit limit. Because exceedances for BOD_5 and TSS were rare and relatively low, the EPA determined that Harrison WWTP is consistently meeting its permit effluent concentration limits.

Table 5. BOD_5 and TSS Numeric Effluent Limit Violations (2008-March 2019; violations in red)

BOD_5 - (Total number of monthly average samples = 97 samples)			
Date	**Monthly Average (mg/L) permit limit = 30 mg/L**	**Weekly Average (mg/L) permit limit = 45 mg/L**	**30-day Average % Removal**
7/31/2013	**31.4**	31.4	92%
8/31/2013	**39.35**	**52.9**	98%
4/30/2018	**31**	31	79%
TSS			
Date	**Monthly Average permit limit = 45 mg/L**	**Weekly Average permit limit = 65 mg/L**	**30-day Average % Removal**
6/30/2008	**46**	46	91%
7/31/2009	**48**	48	93%

The EPA then evaluated the second portion of the first criteria, whether the facility could consistently meet the 85% percent removal requirements, and if not, whether that was due to low influent wastewater. The previous permit had no percent removal requirements, so the EPA calculated the percent removal achieved by the Harrison WWTP by calculating the percent of BOD_5 and TSS removed from influent. Of 100 data points between 2008 and March 2019, there were 15 occurrences where Harrison WWTP did not attain at least 85% removal of BOD_5 from influent. These exceedances occurred regularly from 2010 to 2019 in different seasons and represent violations 15% of the time as shown in Table 6. The violations over several years and in different seasons shows that the Harrison WWTP cannot consistently meet percent removal requirements for BOD_5.

The EPA then evaluated whether this was due to low influent wastewater. Table 6 shows the influent concentrations when less than 85% removal of BOD_5 was achieved. The EPA compared these influent concentrations with all BOD_5 influent concentrations from 2008 to March 2019. All influent data ranged widely from 5.4 mg/L to 978 mg/L with an average of 252 mg/L. As shown in Table 6, 14 of 15 of the BOD_5 influent concentrations associated with less than 85% removal of BOD_5, were lower than the average BOD_5 of 252 mg/L, with values 16% to 97% lower than the overall average BOD_5 influent concentration. This shows that the lower percent removals for BOD_5 are linked to low BOD_5 influent concentrations.

Table 6. BOD_5 Exceedances of 85% Removal and Influent Concentrations (2008 - March 2019)

BOD_5			
Date	**Monthly Average Influent Concentrations (mg/L)**	**Influent comparison to average BOD_5 influent of 252 mg/L**	**% Removal**
2/8/2010	118	-53%	80%
4/30/2010	84	-67%	75%
11/30/2011	125	-50%	84%
6/30/2012	68	-73%	78%
12/31/2012	51	-80%	78%
3/31/2014	40	-84%	79%
7/31/2014	5.4	-98%	-15%
10/31/2015	132	-48%	83%
6/30/2016	123	-51%	78%
2/28/2017	114	-55%	83%
4/30/2018	145	-42%	79%
11/30/2018	340	+35%	83%
1/31/2019	120	-52%	75%
2/28/2019	127	-50%	66%
3/31/2019	211	-16%	75%

Similarly, the EPA evaluated whether Harrison WWTP could consistently remove at least 85% of TSS and whether that was due to low influent. Of 101 data points between 2008 and March 2019, there were 13 occurrences where Harrison WWTP did not attain at least 85% removal of TSS from influent. These exceedances occurred regularly from 2008 to 2019 in different seasons and represent violations 13% of the time, which shows that Harrison WWTP has difficulty in consistently meeting percent removal requirements for TSS.

The EPA then evaluated whether this was due to low influent concentrations. Table 7 shows the influent concentrations when less than 85% removal of TSS was achieved. The EPA compared these influent concentrations with all TSS influent concentrations from 2008 to March 2019. All TSS influent concentrations ranged widely from 24 mg/L to 2250 mg/L with an average of 343 mg/L. As shown in Table 7, all monthly average influent concentrations where treatment removed less than 85% of TSS were lower than the average TSS concentration, with values 47% to 93% lower than the overall average TSS influent

concentration. This shows that the lower percent removals for TSS are linked to low TSS influent concentrations.

Table 7. TSS Exceedances of 85% Removal (2008-March 2019)

TSS Date	Monthly Average Influent	Influent comparison (% compared average TSS influent of 343 mg/L)	% Removal
1/31/2008	29	-92%	82%
5/31/2008	123	-64%	72%
4/30/2010	55	-84%	47%
1/30/2011	52	-85%	81%
12/31/2012	51	-85%	71%
4/30/2013	68	-80%	44%
3/31/2015	53	-85%	75%
10/31/2015	62	-82%	82%
8/31/2016	180	-47%	79%
11/30/2018	124	-64%	83%
1/31/2019	124	-64%	75%
2/28/2019	24	-93%	66%
3/31/2019	28	-92%	75%

Based on this evaluation, the EPA determined that Harrison WWTP met the first criterion for having less than 85% removal requirements for BOD_5 and TSS.

The second criterion requires an evaluation of whether the facility would have to achieve significantly more stringent requirements than would be required by concentration-based limits. As seen in Tables 6 and 7 and as described earlier, TSS and BOD_5 removal less than 85% has occurred consistently in the last ten years and relate to low influent concentrations. The May 11, 2018 fact sheet explains that the influent comes from septic tanks, which have already received pre-treatment making additional removal of BOD_5 and TSS difficult. Harrison WWTP already aerates their lagoons to maximize biochemical breakdown of BOD_5 and TSS. To achieve additional removal beyond the current treatment system could require additional technologies or chemicals that would result in additional expenses.[5] Therefore, the EPA determined that Harrison WWTP meets this criterion.

The third criterion at 40 CFR 133.103(d)(3) states that a lower percent removal requirement is acceptable when the above conditions are met and "the less concentrated influent wastewater is not the result of excessive I/I." This is defined at 40 CFR 35.2005(b)(16) as

[5] EPA's NPDES Permit Writers' Manual (2010) states, "Congress recognized that unless alternate limitations were set for facilities with trickling filters or waste stabilization ponds, which often are in small communities, such facilities could be required to construct costly new treatment systems to meet the secondary treatment standards even though their existing treatment technologies could achieve significant biological treatment. To prevent requiring upgrades where facilities were achieving their original design performance levels, Congress included provisions in the 1981 amendments to the Clean Water Act Construction Grants program (Public Law 97-117, Section 23) that required EPA to make allowances for alternative biological treatment technologies, such as a trickling filters or waste stabilization ponds."

"the quantities of infiltration/inflow which can be economically eliminated from a sewer system as determined in a cost-effectiveness analysis that compared the costs for correcting the infiltration/inflow conditions to the total costs for transportation and treatment of the infiltration/inflow." The City of Harrison provided information on their septic tank effluent program (STEP), a pressurized system for delivering treated wastewater to their treatment plant.

40 CFR 133.103(d) also requires Harrison WWTP to meet a threshold that inflow is nonexcessive if the total flow to a POTW is less than 275 gallons per capita per day. The EPA used a design flow of 0.03 million gallons per day (MGD) for a population of 284 people from the Harrison permit application. Based on this evaluation,

$$\text{0.03 million gallons per day/284 people} = \text{30,000 gallons per day/284 people} = \underline{\textit{106 gallons per capita per day}}$$

Therefore, Harrison is under the threshold for excessive inflow, and the EPA determined that Harrison WWTP meets the third criteria. **Based on this evaluation, the EPA has concluded that a lower percent removal is allowable.**

In the current permit, to evaluate the new percent removal limits, the EPA calculated the 5th percentile of BOD_5 and TSS percent removal rates between 2008-2017. The EPA used this process to develop a percent removal rate low enough to accommodate variability within control of the facility, but to still require significant reductions in the percent BOD_5 and TSS, even when influent concentrations are low. The 5th percentile Harrison WWTP achieved between 2008 and 2017 was 78 percent removal for BOD_5 and 75 percent removal for TSS.

Since additional data have been collected since 2017, the EPA did additional analysis on data from 2008 to March 2019 to verify that percent removal requirements in the current permit were reasonable. The EPA calculated the 5th percentile of BOD_5 and TSS percent removal rates based on this data and determined the percent removal was 79 percent removal for BOD_5 and 74 percent removal for TSS. Since these values are close to the percent removal requirements in the current permit, and since the appeal was based on the lack of public comment on the current permit's percent removal requirements, the proposed permit modification retains the original percent removal requirements of 78 percent removal for BOD5 and 75 percent removal for TSS. In addition, there were no percent removal requirements for BOD_5 and TSS in the permit prior to that, so there is no anti-backsliding concern.

In the next permit cycle, BOD_5 and TSS percent removals will be evaluated against 40 CFR 133.103(d) to determine whether percent removals lower than 85 percent can be allowed.

C. Re-proposal of BOD_5 and TSS Numeric and Percent Removal Limits

The EPA is re-proposing BOD_5 and TSS numeric limits and percent removal limits, which are identical to the limits in the current permit that were stayed. The final effluent limits are based on the evaluation and calculations above. These limits are listed in Table 8, below.

Table 8. Re-proposed BOD_5 and TSS Effluent Limits

		Effluent Limitations		
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand (BOD_5)	mg/L	30	45	--
	lbs/day	8	11	--
BOD_5 Percent Removal	%	78 (minimum)	--	--
Total Suspended Solids (TSS)	mg/L	45	65	--
	lbs/day	11	16	--
TSS Percent Removal	%	75 (minimum)	--	--

V. Other Legal Requirements

A. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. A review of the threatened and endangered species found bull trout as a threatened species in the vicinity of Harrison's WWTP discharge. The EPA previously determined the permit renewal will have no effect on listed species or critical habitat, because the Harrison WWTP discharge is insignificant and because it discharges into a small slough that is not likely to have bull trout populations. See May 11, 2019 fact sheet, Appendix F.

B. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires the EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect EFH (i.e., reduce quality and/or quantity of EFH).

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts,

including individual, cumulative, or synergistic consequences of actions. The EPA has prepared an EFH assessment which appears in the May 11, 2018 fact sheet, Appendix G.

The EPA has made a no effect determination, because there are no EFH in the vicinity of the discharge. The EPA has provided NOAA Fisheries with copies of the draft permit and fact sheet during the public notice period. Any comments received from NOAA Fisheries regarding EFH will be considered prior to reissuance of this permit.

C. State Certification

Section 401 of the CWA requires the EPA to seek State certification before issuing a final permit. As a result of the certification, the State may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with water quality standards, or treatment standards established pursuant to any State law or regulation. IDEQ determined a revised state certification was not necessary for this permit, since the permit limits are unchanged from the current permit in effect. A copy of the final 401 certification for the 2018 permit is provided in Appendix C.

D. Antidegradation

IDEQ determined that since there were no changes to the current permit as a result of the remand, nothing would change the nature of the antidegradation analysis and discussion in the analysis and discussion of IDEQ's antidegradation review. The antidegradation analysis of the 2018 permit is provided in the final 401 certification provided in Appendix C.

E. Permit Expiration

The permit will expire on August 31, 2023.

VI. References

Coeur d'Alene Tribe and IDEQ. 2009. Coeur d'Alene Lake Management Plan. March 2009.

Coeur d'Alene Tribe and IDEQ. 2016. Coeur d'Alene Lake Management Program: Summary of Lake Status and Trends, 2008-2014. February 2016.

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https://www3.epa.gov/npdes/pubs/pwm_2010.pdf

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EPA. 2014. *Water Quality Standards Handbook Chapter 5: General Policies. Environmental Protection Agency*. Office of Water. EPA 820-B-14-004. September 2014. https://www.epa.gov/sites/production/files/2014-09/documents/handbook-chapter5.pdf

EPA. 2017. *Water Quality Standards for Approved Surface Waters of the Coeur d'Alene Tribe Effective June 12, 2014*. February 2017.

EPA. 2018. *Fact Sheet for City of Harrison, ID0021997*. May 11, 2018.

EPA. 2018. *NPDES Permit for City of Harrison, ID0021997*. September 1, 2018.

IDEQ. *Idaho Administrative Code IDAPA 58.01.02, Water Quality Standards*.

Appendix A. Facility Information

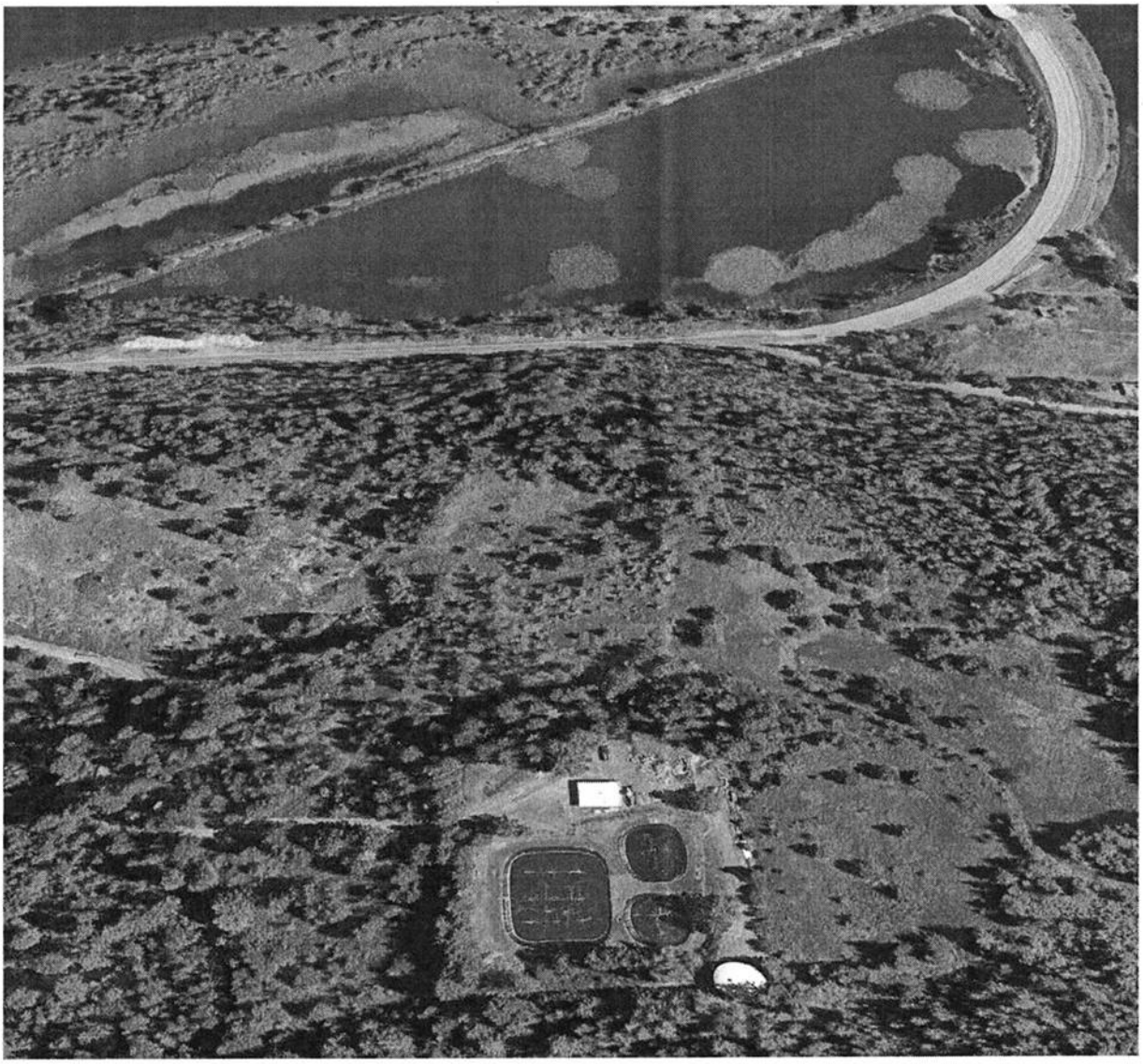

Figure 1. Harrison WWTP and Anderson Slough, Harrison, Idaho (Google Earth Pro, 6/20/17)

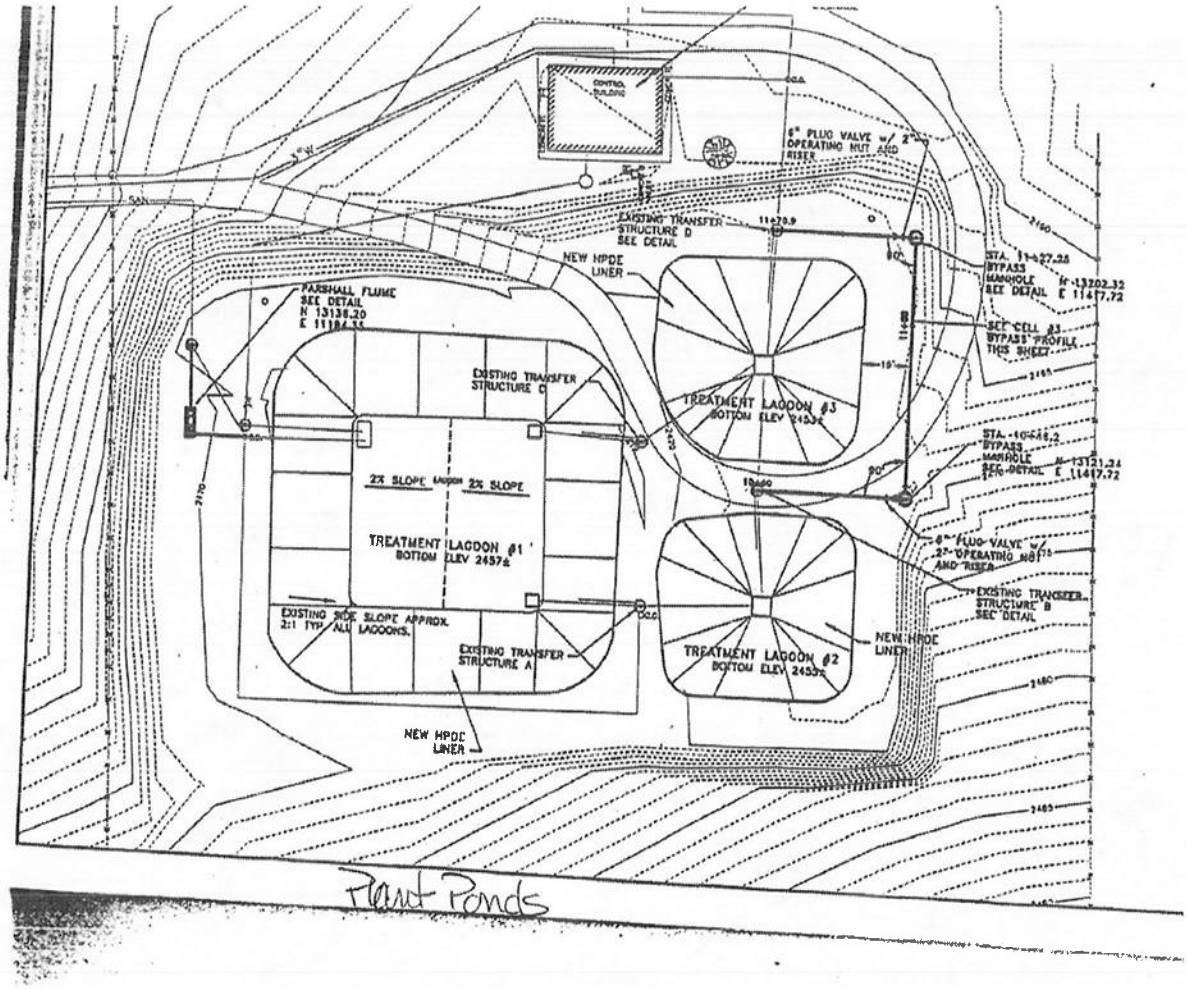

Figure 2. Schematic of Harrison WWTP

Appendix B. Water Quality Data

	Effluent				Influent			
	BOD, 5-day	BOD, 5-day	TSS	TSS	BOD, 5-day	TSS	BOD5 calculated % removal	TSS calculated % removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Monthly Average	Monthly Average	Monthly Average
Monitoring Period End Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Percent	Percent
9/30/2005	25.9	31.6	25.4	30.5	193.66		86.63	
10/31/2005	32.175	43.6	33.3	18.7	124.5		74.16	
11/30/2005	24	30.2	8.37	9.2	90.53		73.49	
12/31/2005	18.3	46	5.8	6	78		76.54	
1/31/2006	20.85	26.5	5	5	94.9		78.03	
2/28/2006	6.8	10.2	5	5	130	43	94.77	88.37
3/31/2006	25.3	25.3	7	7	166	28	84.76	75.00
4/30/2006	30.533	42.9	26.33	34	100.533	31.3	69.63	15.88
5/31/2006	30.1	44.2	20	23	147.5	29.5	79.59	32.20
6/30/2006	39	59.8	17.67	21	143.3	32.67	72.78	45.91
7/31/2006	69.5	69.5	22	22	167	81	58.38	72.84
8/31/2006	43.2	43.2	9	9	122	51	64.59	82.35
9/30/2006	28.7	28.7	40	40	108	37	73.43	-8.11
10/31/2006	11.7	12.4	12	13	90.7	36	87.10	66.67
11/30/2006	26.4	26.4	5	5	88.8	62	70.27	91.94
12/31/2006								
1/31/2007	13.3	13.3	5	5	81.4	21	83.66	76.19
2/28/2007	4.6	4.6	5	5	63	13	92.70	61.54
3/31/2007	14.8	14.8	8	8	120	62	87.67	87.10
4/30/2007	14.9	14.9	23	23	117	35	87.26	34.29
5/31/2007	44	44	85	85	116	43	62.07	-97.67
6/30/2007	61.1	61.1	71.6	71.6	106	62.8	42.36	-14.01

	Effluent				Influent			
	BOD, 5-day	BOD, 5-day	TSS	TSS	BOD, 5-day	TSS	BOD5 calculated % removal	TSS calculated % removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Monthly Average	Monthly Average	Monthly Average
Monitoring Period End Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Percent	Percent
11/30/2007	72.6	72.6	45	45	142	176	48.87	74.43
12/31/2007	10	10	13	13	77	16	87.01	18.75
1/31/2008	15.9	15.9	5	5	126	29.2	87.38	82.88
2/29/2008	11	11	7.4	7.4	95.6	50.4	88.49	85.32
3/31/2008	7.8	7.8	6.6	6.6	101	69.6	92.28	90.52
4/30/2008	12	12	6.4	6.4	174	202	93.10	96.83
5/31/2008	15	15	34.4	34.4	236	123	93.64	72.03
6/30/2008	23.3	23.3	45.8	45.8	406	535	94.26	91.44
7/31/2008	21.8	21.8	42	42	399	636	94.54	93.40
8/31/2008	25.8	25.8	32	32	362	676	92.87	95.27
9/30/2008	14.2	14.2	20.4	20.4	202	153	92.97	86.67
10/31/2008	9.4	9.4	9	9	132	229	92.88	96.07
11/30/2008	14.8	14.8	6.2	6.2	112	48.2	86.79	87.14
12/31/2008								
1/31/2009	6.4	6.4	6.2	6.2	120	88.2	94.67	92.97
2/28/2009								
3/31/2009	12.5	12.5	8.2	8.2	152	94.8	91.78	91.35
4/30/2009	14.6	14.6	21.2	21.2	240	232	93.92	90.86
5/31/2009								
6/30/2009	11	11	19.8	19.8	167	208	93.41	90.48
7/31/2009	28.5	28.5	48.4	48.4	372	717	92.34	93.25
8/31/2009	26.8	26.8	8	8	834	2250	96.79	99.64
9/30/2009	16.8	16.8	5	5	448	620	96.25	99.19
10/31/2009								
11/30/2009	10	10	8	8.8	174	270	94.25	97.04
12/31/2009								
1/31/2010	13.3	13.3	5	5	95.6	72	86.09	93.06

	Effluent				Influent			
	BOD, 5-day	BOD, 5-day	TSS	TSS	BOD, 5-day	TSS	BOD5 calculated % removal	TSS calculated % removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Monthly Average	Monthly Average	Monthly Average
Monitoring Period End Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Percent	Percent
6/30/2010	8.3	8.3	5	5	112	447	92.59	98.88
7/31/2010	18.1	18.1	10	10	957	1610	98.11	99.38
8/31/2010	24.2	24.2	5	5	888	916	97.27	99.45
9/30/2010	16	23.6	9.5	10	978	1750	98.36	99.46
10/31/2010								
11/30/2010	2	2	5	5	72	76	97.22	93.42
12/31/2010								
1/31/2011	6.3	6.3	10	10	96	52	93.44	80.77
2/28/2011								
3/31/2011	5.3	5.3	5	5	80.4	104.5	93.41	95.22
4/30/2011	16.9	16.9	7	7	267	440	93.67	98.41
5/31/2011	17.5	17.5	17	17	125	192	86.00	91.15
6/30/2011	25	25	8	8	391	1690	93.61	99.53
7/31/2011	14	14	5	5	261	140	94.64	96.43
8/31/2011	18.8	18.8	5	5	401	620	95.31	99.19
9/30/2011	13.7	13.7	10	10	506	852	97.29	98.83
10/31/2011								
11/30/2011	20	20.6	12.5	20	125	115	84.00	89.13
12/31/2011								
1/31/2012	20.3	20.3	8	8	177	194	88.53	95.88
2/29/2012								
3/31/2012	7.1	7.1	5	5	185	310	96.16	98.39
4/30/2012								
5/31/2012	18.6	18.6	20	20	158	170	88.23	88.24
6/30/2012	17.5	17.5	7	7	79.5	126	77.99	94.44
7/31/2012	16.2	16.2	5	5	236	416	93.14	98.80
8/31/2012	12.5	12.5	5	5	288	230	95.66	97.83

	Effluent				Influent			
	BOD, 5-day	BOD, 5-day	TSS	TSS	BOD, 5-day	TSS	BOD5 calculated % removal	TSS calculated % removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Monthly Average	Monthly Average	Monthly Average
Monitoring Period End Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Percent	Percent
1/31/2013								
2/28/2013	16.7	16.7	5	5	121	41	86.20	87.80
3/31/2013								
4/30/2013	18.5	18.5	38	38	142	68	86.97	44.12
5/31/2013								
6/30/2013	26	26	9	9	376	654	93.09	98.62
7/31/2013	31.4	31.4	19	19	397	1110	92.09	98.29
8/31/2013	39.35	52.9	21	28	389.5	452	89.90	95.35
9/30/2013	11.8	11.8	9	9	153	148	92.29	93.92
10/31/2013								
11/30/2013								
12/31/2013								
1/31/2014	8.6	8.6	5	5	159	41	94.59	87.80
2/28/2014								
3/31/2014	8.5	8.5	5	5	40	124	78.75	95.97
4/30/2014								
5/31/2014	6.8	6.8	5	5	239	316	97.15	98.42
6/30/2014	3.7	3.7	6	6	176	229	97.90	97.38
7/31/2014	6.2	6.2	5	5	5.4	760	-14.81	99.34
8/31/2014	13	13	15	15	201	129	93.53	88.37
9/30/2014	5.8	5.8	5	5	121	87	95.21	94.25
10/31/2014								
11/30/2014	18.2	18.2	5	5	292	234	93.77	97.86
12/31/2014								
1/31/2015	4.5	4.5	5	5	143	61	96.85	91.80
2/28/2015								
3/31/2015	24.7	24.7	13	13	176	52.7	85.97	75.33
	Effluent				Influent			

	BOD, 5-day	BOD, 5-day	TSS	TSS	BOD, 5-day	TSS	BOD5 calculated % removal	TSS calculated % removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Monthly Average	Monthly Average	Monthly Average
Monitoring Period End Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Percent	Percent
8/31/2015	10.4	10.4	5	5	346	440	96.99	98.86
9/30/2015								
10/31/2015	23	23	11	11	132	62	82.58	82.26
11/30/2015								
12/31/2015	11.6	11.6	5	5	163	47	92.88	89.36
1/31/2016								
2/29/2016	6.5	6.5	5	5	363	510	98.21	99.02
3/31/2016	8.8	8.8	5	5	325	172	97.29	97.09
4/30/2016								
5/31/2016	10.8	10.8	9	9	194	115	94.43	92.17
6/30/2016	27.3	27.3	5	5	123	152	77.80	96.71
7/31/2016	25.9	25.9	21	21	321	323	91.93	93.50
8/31/2016	25.7	25.7	38	38	191	180	86.54	78.89
9/30/2016								
10/31/2016	16.1	16.1	0.2	0.2	110	86	85.36	99.77
11/30/2016	6.4	6.4	5	5	263	176	97.57	97.16
12/31/2016	33.6	33.6	21	21	395	1250	91.49	98.32
1/31/2017								
2/28/2017	19.05	32.8	5.5	6	114	63	83.29	91.27
3/31/2017	2.6	2.6	5	5	127	92	97.95	94.57
4/30/2017	7.5	7.5	5	5	184	172	95.92	97.09
5/31/2017								
6/30/2017	6.4	6.4	5	5	263	176	97.57	97.16
7/31/2017								

NEW DATA NOT USED FOR 2018 PERMIT DEVELOPMENT								
	Effluent				Influent			
	BOD, 5-day	BOD, 5-day	TSS	TSS	BOD, 5-day	TSS	BOD5 calculated % removal	TSS calculated % removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Monthly Average	Monthly Average	Monthly Average
Monitoring Period End Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Percent	Percent
12/31/2017								
1/31/2018	18	18	5	5	212	217	91.51	97.70
2/28/2018	16.2	16.2	5	5	271	235	94.02	97.87
3/31/2018	24.3	24.3	5	5	187	118	87.01	95.76
4/30/2018	31	31	8	8	145	216	78.62	96.30
5/31/2018								
6/30/2018	8.6	8.6	5	5	348	565	97.53	99.12
7/31/2018	6.3	6.3	5	5	626	1350	98.99	99.63
8/31/2018	5.7	5.7	5	5	505	560	98.87	99.11
9/30/2018	9.8	9.8	5	5	642	880	99	99
10/31/2018								
11/30/2018	19	19	21	21	340	124	94	83
12/31/2018	5.1	5.1	5	5	196	132	97	96
1/31/2019	19.5	26.8	30.7	40.2	119.5	124	84	75
2/28/2019	7.9	7.9	8	8	127	24	93	66
3/31/2019	15	15	7	7	211	28	92	75

Includes data from 2008-7/31/2017								
	BOD5, monthly average, mg/L	BOD, weekly average, mg/L	TSS, monthly average, mg/L	TSS weekly average, mg/L	Influent, BOD5 monthly average	Influent, TSS monthly average	30-day average % BOD removal	30-day average % TSS removal
average	15.08	15.53	11.34	11.64	244.21	346.44	90.50	92.31
min	2.00	2.00	0.20	0.20	5.40	29.20	-14.81	44.12
max	39.35	52.90	48.40	48.40	978.00	2250.00	98.36	99.77
count	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00
stdev	7.72	8.65	10.44	10.78	190.41	428.69	13.07	9.76
cv	0.51	0.56	0.92	0.93	0.78	1.24	0.14	0.11
95th %	27.30	28.50	38.00	38.00	506.00	1250.00	97.90	99.45
5th%	5.30	5.30	5.00	5.00	79.50	48.20	78.22	75.33
2005 and 2018 Permit Limits	30	45	45	65				
proposed limits			42.75			57		

Meeting Equivalent to 2nd Treatment Standards:	BOD5; Monthly Average	BOD5; Weekly Average	BOD5 % removal	TSS; Monthly Average	TSS; Weekly Average	TSS Percent Removal
	No: 95th percentile = 27 mg/L < 30 mg/L	No: (95th percentile of monthly*1.5) = 42.75 mg/L < 45 mg/L	Yes: 5th percentile = 78% > 65%	Yes: 95th percentile = 38 mg/L > 30 mg/L	Yes: (95th percentile of monthly*1.5) 57 mg/L > 45 mg/L	Yes: 5th percentile 75%>65%
Criterion 2:	Harrison has a waste stabilization pond (lagoon)					

Includes data from 2008-2019								
	BOD5, monthly average, mg/L	BOD, weekly average, mg/L	TSS, monthly average, mg/L	TSS weekly average, mg/L	Influent, BOD5 monthly average	Influent, TSS monthly average	30-day average % BOD removal	30-day average % TSS removal
average	14.81	15.25	10.81	11.16	252.14	342.62	90.96	92.25
min	2.00	2.00	0.20	0.20	5.40	24.00	-14.81	44.12
max	39.35	52.90	48.40	48.40	978.00	2250.00	99.00	99.77
count	97.00	97.00	97.00	97.00	97.00	97.00	97.00	97.00
stdev	7.67	8.54	10.02	10.57	187.20	415.96	12.19	9.88
cv	0.52	0.56	0.93	0.95	0.74	1.21	0.13	0.11
95th %	27.54	29.00	35.12	38.00	629.20	1270.00	98.13	99.45
5th%	5.26	5.26	5.00	5.00	80.22	45.80	78.54	74.41
2005 and 2018 Permit Limits	30	45	45	65				
proposed limits								

	BOD; Monthly Average	BOD; Weekly Average	BOD Percent Removal	TSS; Monthly Average	TSS; Weekly Average	TSS Percent Removal
		43.5			57	
Meeting Equivalent to 2nd Treatment Standards:	No: 95th percentile = 28 mg/L < 30 mg/L	No: (95th percentile of monthly*1.5) = 44mg/L < 45 mg/L	Yes: 5th percentile = 77% > 65%	Yes: 95th percentile= 35 mg/L > 30 mg/L	Yes: (95th percentile of monthly*1.5) = 57 mg/L > 45 mg/L	Yes: 5th percentile: 74% > 65%
Criterion 2:	Harrison has a waste stabilization pond (lagoon)					

Appendix C. CWA 401 State Certification

The EPA requested preliminary CWA 401 certification from IDEQ on May 16, 2019. IDEQ responded that a revised state certification was not necessary for this permit, since the permit limits are unchanged from the current permit in effect. With this draft modification of the permit, the EPA is including IDEQ's final CWA 401 certification for the permit currently in effect.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, Idaho 83814 • (208) 769-1422
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

June 22, 2018

Ms. Susan Poulsom
US Environmental Protection Agency, Region 10
1200 6th Avenue, OW-130
Seattle, WA 98101

RE: Final §401 Water Quality Certification for the Final NPDES Permit No. ID-0021997 for the City of Harrison Wastewater Treatment Plant

Dear Ms. Poulsom:

The State of Idaho Department of Environmental Quality (DEQ) received a request for final certification on June 20, 2018 for the Harrison Wastewater Treatment Plant to discharge from their existing facility. After review of the proposed final permit, DEQ submits the enclosed final §401 water quality certification.

Please direct any questions to June Bergquist at 208.666.4605 or june.bergquist@deq.idaho.gov .

Sincerely,

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

Enclosure

C: Loren Moore, DEQ Boise
Jenny Wu, EPA Region 10, Seattle
Mayor Kayleen Walker, City of Harrison P.O. Box 73 Harrison, ID 83833

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

June 22, 2018

NPDES Permit Number(s): Harrison Wastewater Treatment Plant ID0021997

Receiving Water Body: Anderson Slough

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon our review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

Harrison WWTP discharges the following pollutants of concern: ammonia, phosphorus, chlorine, BOD_5, TSS, pH, and *E. coli* bacteria. Effluent limits have been developed for BOD_5, TSS, *E. coli*, chlorine, ammonia, and pH. No effluent limits are proposed for phosphorus.

Receiving Water Body Level of Protection

The Harrison WWTP discharges to Anderson Slough, an unassessed waterbody with no assessment unit. Anderson Slough is undesignated. DEQ presumes undesignated waters in the state will support cold water aquatic life and primary and secondary contact recreation beneficial uses; therefore, undesignated waters are protected for these uses (IDAPA 58.01.02.101.01.a). In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

This waterbody is not included in Category 3 (Unassessed Waters) of the 2014 Integrated Report. However for unassessed waters, DEQ must provide an appropriate level of protection on a case-by-case basis using information available at this time (IDAPA 58.01.02.052.05.b).

The contact recreation and cold water aquatic life beneficial uses are unassessed, however *E. coli* data collected by DEQ for this certification indicate that recreational uses are fully supporting. Because the collection of data necessary to determine the support status of cold water aquatic life would need to occur in summer months, the applicant has agreed to consider Anderson Slough high quality waters for cold water aquatic life for the purposes of this, and only this, antidegradation review. Therefore, DEQ will provide Tier I in addition to Tier II protection for these uses (IDAPA 58.01.02.051.01 and 58.01.02.051.02).

Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing and designated uses and the level of water quality necessary to protect existing and designated uses shall be maintained and protected. In order to protect and maintain existing and designated beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses. The effluent limitations and associated requirements contained in the Harrison WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS.

Although, Anderson Slough has no outlet or visible culverts in banks that surround the slough, water levels in the slough rises and falls with water level changes in the river and lake. There are two culverts under the Trail of the Coeur d'Alenes near the City of Harrison that connect it to the lake during periods of high flows. Due to the lack of hydrologic information and flow, no mixing was allowed for the effluent. WQS must be met at end of pipe. The design flow for Harrison remains at 0.03 mgd.

In summary, the effluent limitations and associated requirements contained in the Harrison WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Anderson Slough in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier II Protection)

Anderson Slough is considered high quality for cold water aquatic life and recreation uses. As such, the water quality relevant to cold water aquatic life and recreation uses of the Anderson Slough must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to cold water aquatic life and recreation uses of the Anderson Slough (IDAPA 58.01.02.052.05). These include the following: *E. coli* bacteria, phosphorus, chlorine, and ammonia. Effluent limits are set in the proposed and existing permit for *E. coli*, chlorine and ammonia.

For a reissued permit or license, the effect on water quality is determined by looking at the difference in water quality that would result from the activity or discharge as authorized in the current permit and the water quality that would result from the activity or discharge as proposed in the reissued permit or license (IDAPA 58.01.02.052.06.a). For a new permit or license, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new permit or license (IDAPA 58.01.02.052.06.a).

Pollutants with Limits in the Current and Proposed Permit: *E. coli*, Chlorine

For pollutants that are currently limited and will have limits under the reissued permit, the current discharge quality is based on the limits in the current permit or license (IDAPA 58.01.02.052.06.a.i), and the future discharge quality is based on the proposed permit limits (IDAPA 58.01.02.052.06.a.ii). For the Harrison WWTP permit, this means determining the permit's effect on water quality based upon the limits for *E. coli* and chlorine in the current and proposed permits. Table 1 provides a summary of the current permit limits and the proposed or reissued permit limits and shows that there will be no change in load or concentration for either of these pollutants (other than slight changes up and down for ammonia and chlorine due to mathematical and statistical corrections from the previous permit).

Table 1. Comparison of current and proposed permit limits for pollutants of concern relevant to uses receiving Tier II protection.

Pollutant	Units	Current Permit			Proposed Permit			Change[a]
		Average Monthly Limit	Average Weekly Limit	Max Daily Limit	Average Monthly Limit	Average Weekly Limit	Max Daily Limit	
Pollutants with limits in both the current and proposed permit								
Five-Day BOD	mg/L	30	45	—	30	45	—	NC
	lb/day	8	12	—	8	11	—	
	% removal	none	—	—	78%	—	—	
TSS	mg/L	45	65	—	45	65	—	NC
	lb/day	12	18	—	11	16	—	
	% removal	none	—	—	75%	—	—	
pH	standard units	6.5–9.0 all times			6.5–9.0 all times			NC
E. coli	no./100 mL	126	—	406	126	—	406	NC
Total Residual Chlorine (final)	mg/L	0.007	—	0.018	0.009	—	0.017	NC
	lb/day	0.002	—	0.005	0.002	—	0.0045	
Pollutants with new limits in the proposed permit								
Total Ammonia	mg/L	—	—	—	3	—	9	D
	lb/day	—	—	—	0.8	—	2	
Pollutants with no limits in both the current and proposed permit								
Total Phosphorus	mg/L	—	—	Report	—	—	Report	NC

[a] NC = no change, I = increase, D = decrease.

The proposed permit limits for other pollutants of concern that have limits in Table 1, are the same as, or more stringent than, those in the current permit ("NC" or "D" in change column). Therefore, no adverse change in water quality and no degradation will result from the discharge of these pollutants.

New Permit Limits for Pollutants Currently Discharged

When new limits are proposed in a reissued permit for pollutants in the existing discharge, the effect on water quality is based upon the current discharge quality and the proposed discharge quality resulting from the new limits. Current discharge quality for pollutants that are not currently limited is based upon available discharge quality data (IDAPA 58.01.02.052.06.a.i). Future discharge quality is based upon proposed permit limits (IDAPA 58.01.02.052.06.a.ii).

The proposed permit for Harrison WWTP includes new limits for ammonia (Table 1). The ammonia limits in the proposed permit reflect an improvement in water quality from current conditions. Therefore, no adverse change in water quality and no degradation will occur with respect to this pollutant.

Pollutants with No Limits: phosphorus

There is one pollutant of concern, phosphorus, relevant to Tier II protection of recreation that currently is not limited and for which the proposed permit also contains no limit (Table 1). For such pollutants, a change in water quality is determined by reviewing whether changes in production, treatment, or operation that will increase the discharge of these pollutants are likely (IDAPA 58.01.02.052.06.a.ii). With respect to phosphorus, there is no reason to believe this pollutant will be discharged in quantities greater than those discharged under the current permit. This conclusion is based upon the fact that there have been no changes in the permitted design flow, influent quality, or treatment processes that would likely result in an increased discharge of this pollutant. Because the proposed permit does not allow for any increased water quality

impact from this pollutant, DEQ has concluded that the proposed permit should not cause a lowering of water quality for the pollutant with no limit. As such, the proposed permit should maintain the existing water quality in Anderson Slough. Phosphorus monitoring of effluent is proposed for the new permit.

In sum, DEQ concludes that this discharge permit complies with the Tier II provisions of Idaho's WQS (IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Compliance Schedule

Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for water quality–based effluent limits issued in a permit for the first time. Harrison WWTP cannot immediately achieve compliance with the effluent limits for ammonia; therefore, DEQ authorizes a compliance schedule and interim requirements, including interim limits in Table 2, as set forth below. This compliance schedule provides the permittee a reasonable amount of time to achieve the final effluent limits as specified in the permit. At the same time, the schedule ensures that compliance with the final effluent limits is accomplished as soon as possible.

Harrison WWTP relies on a lagoon treatment system which is approaching full design capacity. There is also substantial demand for additional treatment capacity. Reduction of ammonia in a lagoon system is dependent in part on hold time and dissolved oxygen levels in the water. As flows increase, the facility may be less able to hold water for the length of time needed to achieve satisfactory ammonia reduction. Higher summertime temperatures lower the amount of dissolved oxygen in the water (a physical property of water) which reduces the ability of a lagoon system to convert ammonia to less harmful substances (nitrification process). Lagoon aeration can be used to increase oxygen but this method may not be sufficient in a heavily loaded system to achieve ammonia limits. Due to these limitations of the current facility, DEQ has allowed the permittee enough time to construct a new type of treatment system. Ultimately, it will be up to the City of Harrison through their facility planning effort to determine how to meet their new limits if efforts in the Compliance Schedule Part A fail to do so.

The ammonia effluent limit was based on data collected in 2006. At this time, the facility was experiencing compliance issues. Upgrades to the facility were implemented in 2008 which greatly improved compliance. This upgrade and operational changes may have improved ammonia treatment so that new effluent limits might be met without any changes or can be achieved through optimization of the current process. To ensure that compliance with final limits is achieved as soon as possible, DEQ authorizes a two part compliance schedule. Part A focuses on a monitoring and optimization schedule to meet final limits. If these efforts fail, Part B begins a longer more comprehensive facility planning, design, and construction effort to meet ammonia limits.

Interim Requirements for Compliance Schedule Part A

1. Immediately following the effective date of the final permit, the permittee must begin monitoring ammonia concentrations as directed by the final permit and if final ammonia limits are not being met, initiate optimization of treatment to meet final effluent limits.

2. By one (1) year from the date of the final permit, the permittee must provide EPA and DEQ with a written progress report including results of ammonia monitoring and progress made towards meeting final ammonia limits. The report shall also summarize results and indicate that (1) further monitoring and optimization are worthwhile in efforts to meet final effluent limits or (2) further monitoring and optimization are unlikely to result in meeting final limits. If the conclusion is (2) then begin Part B of this compliance schedule.

3. By two (2) years from the date of the final permit, the permittee must provide EPA and DEQ final results of monitoring and optimization and must reliably meet final ammonia limits. If ammonia limits still cannot be met, begin Part B of this compliance schedule.

Interim Requirements for Compliance Schedule Part B

1. By three (3) years after the effective date of the final permit, a draft facility plan shall be submitted to DEQ for review and approval. The facility plan shall include outlining estimated costs and schedules for construction of a new or upgraded wastewater treatment plant and implementation of technologies to achieve final effluent limitations. This schedule must include a timeline for pilot testing. If the new or upgraded plant includes an increase in design capacity, be aware that new additions of phosphorus in Coeur d'Alene Lake may be limited in future permits (*Coeur d'Alene Lake Management Plan*, 2009).

2. By four (4) years after the effective date of the final permit, a final facility plan shall be submitted to DEQ for review and approval.

3. By five (5) years after the effective date of the final permit, the permittee must provide EPA and DEQ with a progress report on funding for the new or upgraded facility. Copy of notice of bond approval or notice of judicial confirmation is acceptable.

4. By six (6) years after the effective date of the final permit, the permittee must provide EPA and DEQ with written notice that design has been completed and approved by DEQ and that bids for construction have been awarded to achieve final effluent limitations.

5. By seven (7) and eight (8) years after the effective date of the final permit, the permittee must provide EPA and DEQ with brief progress reports of construction as they relate to meeting the compliance schedule timeline and final effluent limits.

6. By nine (9) years after the effective date of the final permit, the permittee must provide EPA and DEQ with written notice that construction on the portions of the facility required to achieve final effluent limits has reached substantial completion.

7. By ten (10) years after the effective date of the final permit, the permittee must provide EPA and DEQ with a written report providing details of a completed start up and optimization

phase of the new or upgraded treatment system and must achieve compliance with the final effluent limitations of Part I.B.

Table 2. Interim Limits			
Parameter	Units	Average Monthly Limit	Maximum Daily Limit
Ammonia	mg/L	15	30

The permittee must comply with all other effluent limitations beginning on the effective date of the final permit.

Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to June Bergquist, Coeur d'Alene Regional Office at 208-666-4605 or via email at june.bergquist@deq.idaho.gov .

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 155
Seattle, Washington 98101-3140

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, 33 USC §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

City of Harrison
P.O. Box 73
Harrison, Idaho 83833

is authorized to discharge from the City of Harrison Wastewater Treatment Plant located in Harrison, Idaho, at the following location:

Outfall	Receiving Water	Latitude	Longitude
001	Anderson Slough	47° 27' 31" N	116° 46' 06" W

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective **September 1, 2018**.

This permit and the authorization to discharge shall expire at midnight, **August 31, 2023**.

The permittee shall reapply for a permit reissuance on or before **March 4, 2023**, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this day of

Daniel D. Opalski, Director
Water Division

Schedule of Submissions

Item	Due Date
Discharge Monitoring Reports (DMR)	DMRs are due monthly and must be postmarked on or before the 20th of the month following the monitoring month.
Quality Assurance Plan (QAP)	The permittee must provide the EPA and Idaho Department of Environmental Quality (IDEQ) with written notification that the Plan has been developed and implemented within one year after the effective date of the final permit (see Part II.B of this permit). The Plan must be kept on site and made available to the EPA and IDEQ upon request.
Operation and Maintenance (O&M) Plan	The permittee must provide the EPA and IDEQ with written notification that the Plan has been developed and implemented within one year after the effective date of the final permit (see Part II.A of this permit). The Plan must be kept on site and made available to the EPA and IDEQ upon request.
Phosphorus Reduction Study	The permittee must complete the study and submit the results within three years after the effective date of the permit (see Part II.D of this permit). The study must be kept on site and made available to the EPA and IDEQ upon request.
NPDES Application Renewal	The application must be submitted at least 180 days before the expiration date of the permit (see Part V.B of this permit).
Surface Water Monitoring Report (SWMRP)	The Report must be submitted annually with the January DMR (see Part I.C of this permit)
Compliance Schedule	Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date (see Part II.C of this permit).
Twenty-Four Hour Notice of Noncompliance Reporting	The permittee must report certain occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances (see Part III.G and Paragraph I.B.3 of this permit).
Emergency Response and Public Notification Plan	The permittee must develop and implement an overflow emergency response and public notification plan. The permittee must submit written notice to the EPA and IDEQ that the plan has been developed and implemented within one year of the effective date of this permit. (See Part II.F of this permit)

List of the Industrial Users	The Permittee must develop and maintain a master list of the industrial users introducing pollutants to the POTW. The Permittee must submit this list within two years following the effective date of the NPDES permit. (See Part II.E of this permit.)

Table of Contents

List of Tables

I. Limitations and Monitoring Requirements

A. Discharge Authorization

The permittee is authorized to discharge pollutants from the outfalls specified herein to the Anderson Slough, within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

B. Effluent Limitations and Monitoring

1. The permittee must limit and monitor discharges from outfall 001 as specified in *Table 1. Effluent Limitations and Monitoring Requirements*, below. All figures represent maximum effluent limits unless otherwise indicated. The permittee must comply with the effluent limits in the tables at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

Table 1. Effluent Limitations and Monitoring Requirements

Parameter	Units	Effluent Limitations			Monitoring Requirements		
		Average Monthly	Average Weekly	Maximum Daily	Sample Location	Sample Frequency	Sample Type
Parameters With Effluent Limits							
Biochemical Oxygen Demand (BOD_5)	mg/L	30	45	--	Influent and Effluent	1/month	Grab
	lbs/day	8	11	--			
BOD_5 Percent Removal	%	78 (minimum)	--	--	--	1/month	Calculation[2]
Total Suspended Solids (TSS)	mg/L	45	65	--	Influent and Effluent	1/month	Grab
	lbs/day	11	16	--			
TSS Percent Removal	%	75 (minimum)	--	--	--	1/month	Calculation[2]
E. coli [3]	CFU/ 100 ml	126	--	406 (instant. max) [4]	Effluent	5/month	Grab
Total Residual Chlorine	mg /L	0.009[5]	--	0.017[4,5]	Effluent	1/week	Grab
	lbs/day	0.002[5]	--	0.0045[4,5]			Calculation[1]
Total Ammonia as N	mg/L	3	--	9[4]	Effluent	1/week	Grab
	lbs/day	0.8		2[4]			Calculation[1]
pH	std units	Between 6.5 – 9.0			Effluent	1/week	Grab
Floating, Suspended, or Submerged Matter	--	See Paragraph I.B.2 of this permit				1/month	Visual Observation
		Report Parameters					
Flow	mgd	Report	--	Report	Effluent	1/week	Measurement
Total phosphorus	mg/L	Report		Report	Effluent	2/month	Measurement

Notes

1. Loading (in lbs/day) is calculated by multiplying the concentration (in mg/L) by the corresponding flow (in mgd) and a conversion factor of 8.34. For more information on calculating, averaging, and reporting loads and concentrations see the *NPDES Self-Monitoring System User Guide* (EPA 833-B-85-100, March 1985).
2. Percent Removal. The monthly average percent removal must be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month using the following equation: (average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration x 100. Influent and effluent samples must be taken over approximately the same time period.
3. The average monthly *E. coli* bacteria counts must not exceed a geometric mean of 126/100 ml based on a minimum of five samples taken every 3 - 7 days within a calendar month. See Part VI of this permit for a definition of geometric mean.
4. Reporting is required within 24 hours of a maximum daily limit or instantaneous maximum limit violation. See Paragraph I.B.3 and Part III.G of this permit.
5. The limits for chlorine are not quantifiable using EPA-approved analytical methods. The minimum level (ML) for chlorine is 50 µg/L for this parameter. The EPA will use 50 µg/L as the compliance evaluation level for this parameter. The permittee will be compliance with the total residual chlorine limitations if the average monthly and maximum daily concentrations are less than 50 µg/L and the average monthly and maximum daily mass loadings are less than 0.013 lbs/day. For purposes of calculating the monthly averages, see Paragraph I.B.7 of this permit.

2. Narrative limitations for floating, suspended or submerged matter:
   a) The permittee must not discharge floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses.
   b) The permittee must observe the surface of the receiving water in the vicinity of where the effluent enters the surface water. The permittee must maintain a written log of the observation which includes the date, time, observer, and whether there is presence of floating, suspended or submerged matter. The log must be retained and made available to the EPA and IDEQ upon request.
3. The permittee must report within 24 hours any violation of the maximum daily limits for the following pollutants: E.coli, total residual chlorine, and ammonia. Violations of all other effluent limits are to be reported at the time that discharge monitoring reports are submitted (See Parts III.B.3 *Reporting of Monitoring Results* and III.G. *Twenty-four Hour Notice of Noncompliance Reporting* of this permit).
4. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.
5. For all effluent monitoring, the permittee must use sufficiently sensitive analytical methods which meet the following:
   a) Parameters with an effluent limit. The method must achieve a minimum level (ML) less than the effluent limitation unless otherwise specified in *Table 1. Effluent Limitations and Monitoring Requirements.*
   b) Parameters that do not have effluent limitations.
      (i) The permittee must use a method that detects and quantifies the level of the pollutant, or
      (ii) The permittee must use a method that can achieve a maximum ML less than or equal to those specified in Appendix A;
   c) For parameters that do not have an effluent limit, the permittee may request different MLs. The request must be in writing and must be approved by the EPA.
   d) See also Part III.C *Monitoring Procedures*
6. For purposes of reporting on the DMR for a single sample, if a value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" and if a value is less than the ML, the permittee must report "less than {numeric value of the ML}."
7. For purposes of calculating monthly averages, zero may be assigned for values less than the MDL, and the {numeric value of the MDL} may be assigned for values between the MDL and the ML. If the average value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" and if the average value is less than the ML, the permittee must report "less than {numeric value of the ML}." If a value is equal to or greater than the ML, the permittee

must report and use the actual value. The resulting average value must be compared to the compliance level, the ML, in assessing compliance.

C. Surface Water Monitoring Report (SWMRP)

The permittee must conduct surface water monitoring. Surface water monitoring must start 30 days after the effective date of the permit and continue for 5 years. The program must meet the following requirements:

1. Monitoring stations must be established in Anderson Slough at the following locations:
   a) Above the influence of the facility's discharge, and
   b) Below the facility's discharge, at a point where the effluent and Anderson Slough are completely mixed.
2. Monitoring stations must be established in wetlands northwest of Anderson Slough and in Anderson Slough.
3. The permittee must seek approval of the surface water monitoring stations from IDEQ.
4. A failure to obtain IDEQ's approval of surface water monitoring stations does not relieve the permittee of the surface water monitoring requirements of this permit.
5. To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.
6. Samples must be analyzed for the parameters listed in Table 2. *Surface Water Monitoring Requirements*.
7. For all surface water monitoring, the permittee must use sufficiently sensitive analytical methods which meet the following:
   a) The method must detect and quantify the level of the pollutant, or
   b) The permittee must use a method that can achieve MLs less than or equal to those specified in Appendix A. The permittee may request different MLs. The request must be in writing and must be approved by the EPA.

Table 2. Surface Water Monitoring Requirements

Parameter	Units	Frequency	Sample Type	Location
Dissolved Oxygen	mg/L	1/quarter[1]	Grab	Anderson Slough
Total Phosphorus	mg/L	1/month	Grab	Anderson Slough
		1/month (May – September)	Grab	Wetlands northwest of Anderson Slough
Temperature	°C	1/month	Grab	Anderson Slough
pH	standard units	1/quarter[1]	Grab	Anderson Slough

Notes:
1. For quarterly monitoring frequency, quarters are defined as: January 1 to March 31; April 1 to June 30; July 1 to September 30; and, October 1 to December 31.

8. Quality assurance/quality control (QA/QC) plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II.B.
9. Submission of SW Monitoring
   a) Surface water monitoring results must be reported on the monthly DMR.
   b) The permittee must submit all surface water monitoring results for the previous calendar year for all parameters in an annual report to the EPA and IDEQ by January 31st of the following year and with the application (see Part V.B of this permit, *Duty to Reapply*). The file must be in the format of one analytical result per row and include the following information: name and contact information of laboratory, sample identification number, sample location in latitude and longitude (decimal degrees format), method of location determination (i.e., GPS, survey etc.), date and time of sample collection, water quality parameter (or characteristic being measured), analysis result, result units, detection limit and definition (i.e., MDL etc.), analytical method, date completed, and any applicable notes.
   c) The permittee may submit the surface water monitoring report as an attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_SWMRP, where YYYY_MM_DD is the date that the permittee submits the report.

II. Special Conditions

A. Operation and Maintenance Plan

In addition to the requirements specified in Part IV.E, *Proper Operation and Maintenance*, the permittee must develop and implement an Operations and Maintenance (O&M) Plan for the wastewater treatment facility. Any existing O&M Plan may be modified for compliance with this section. Any changes occurring in the operation of the plant must be reflected within the O&M Plan.

Within one year of the effective date of this permit, the permittee must submit written notice to the EPA and IDEQ that the O&M Plan has been developed and implemented.

The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_O&M_50108, where YYYY_MM_DD is the date that the permittee submits the written notification. The plan must be retained on site and made available to the EPA and/or IDEQ upon request.

B. Quality Assurance Plan (QAP)

The permittee must develop a quality assurance plan (QAP) for all monitoring required by this permit. Any existing QAPs may be modified for compliance with this section.

Within one year of the effective date of this permit, the permittee must submit written notice to the EPA and IDEQ that the QAP has been developed and implemented. The

permittee may submit written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_QAP_55099, where YYYY_MM_DD is the date that the permittee submits the written notification. The plan must be retained on site and made available to the EPA and/or IDEQ upon request.

1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.
2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *EPA Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.
3. At a minimum, the QAP must include the following:
   a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
   b) Map(s) indicating the location of each sampling point.
   c) Qualification and training of personnel.
   d) Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
4. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
5. Copies of the QAP must be retained on site and made available to the EPA and/or IDEQ upon request.

C. Total Ammonia as Nitrogen Schedule of Compliance

1. The permittee must achieve compliance with the ammonia limitations of Part I.B, *Table 1. Effluent Limitations and Monitoring Requirements*) by September 1, 2020 per Compliance Schedule Part A in Table 3. If the permittee is unable to achieve compliance with the final ammonia limitations after September 1, 2020, then the permittee must achieve compliance with the final ammonia limitations by September 1, 2028 per Compliance Schedule Part B in Table 4.

In the interim, the following effluent limits must be met:

Average Monthly Limit:	15 mg/L
Maximum Daily Limit:	30 mg/L

2. Until compliance with the effluent limits is achieved, at a minimum, the permittee must complete the tasks and reports listed in Table 3. If the permittee is unable to achieve final ammonia limits after September 1, 2020 of the permit, then at a minimum, the permittee must also complete the tasks and reports listed in Table 4.

Table 3. Tasks Required Under Compliance Schedule Part A for Ammonia

Task No.	Due By	Task Activity
	September 1, 2018	**Ammonia Monitoring and Operations Optimization** Immediately following the effective date of the final permit, the permittee must begin monitoring ammonia concentrations as directed by the final permit. If final ammonia limits are not being met, initiate optimization of treatment to meet final effluent limits within 6 months of the effective date of the final permit. Deliverable: The permittee must provide written notice to the EPA and IDEQ if optimization is initiated. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartA_Optimization_43699, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2019	**Ammonia Part A Progress Report** By one (1) year from the effective date of the final permit, the permittee must provide the EPA and IDEQ with a written progress report including results of ammonia monitoring and progress made towards meeting final ammonia limits. The report shall also summarize results and indicate that (1) further monitoring and optimization are worthwhile in efforts to meet final effluent limits or (2) further monitoring and optimization are unlikely to result in meeting final limits. If the conclusion is (2) then begin Part B of this compliance schedule Deliverable: The permittee must submit the report to the EPA and IDEQ. The permittee may submit the report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartA_Progress_Report_CS010, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2020	**Ammonia Part A Final Report** By two (2) years from the effective date of the final permit, the permittee must provide the EPA and IDEQ final results of the monitoring and optimization and must reliably meet final ammonia limits. If ammonia limits still cannot be met, begin Part B of this Compliance Schedule. Deliverable: The permittee must submit the report to the EPA and IDEQ. The permittee may submit the report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartA_Final_Report_CS010, where YYYY_MM_DD is the date that the permittee submits the written notification.

Table 4. Tasks Required Under Compliance Schedule Part B for Ammonia

Task No.	Due By	Task Activity
	September 1, 2021	**Draft Facility Plan** By three (3) years after the effective date of the final permit, a draft facility plan shall be submitted to IDEQ for review and approval. The facility plan shall include outlining estimated costs and schedules for construction of a new or upgraded wastewater treatment plant and implementation of technologies to achieve final effluent limitations. This schedule must include a timeline for pilot testing. If the new or upgraded plant includes an increase in design capacity, be aware that new additions of phosphorus in Coeur d'Alene Lake may be limited in future permits. Deliverable: The permittee must provide written notice to the EPA that the draft facility plan has been submitted to IDEQ. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997__PartB_DraftPlan_43699, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2022	**Final Facility Plan** By four (4) years from the effective date of the final permit, a final facility plan shall be submitted to IDEQ for review and approval. Deliverable: The permittee must provide written notice to the EPA that the facility plan has been submitted to IDEQ. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997__PartB_FinalPlan_43699, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2023	**Facility Funding Progress Report** By five (5) years from the effective date of the final permit, the permittee must provide the EPA and IDEQ with a progress report on funding for the new or upgraded facility. Copy of notice of bond approval or notice of judicial confirmation is acceptable. Deliverable: The permittee must submit the report to the EPA and IDEQ. The permittee may submit the report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartB_Funding_90408, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2024	**Facility Design and Construction Bid Awarded** By six (6) years from the effective date of the final permit, the permittee must provide the EPA and IDEQ with written notice that design has been completed and approved by DEQ and that bids for construction have been awarded to achieve final effluent limitations. Deliverable: The permittee must submit the report to the EPA and IDEQ. The permittee may submit the report as an electronic attachment to the DMR. The file name of the electronic attachment for facility design must be as follows: YYYY_MM_DD_ ID0021997_PartB_Design_90408, where YYYY_MM_DD is the date that the permittee submits the written notification. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartB_BidAwarded_43699, where YYYY_MM_DD is the date that the permittee submits the written notification.

Task No.	Due By	Task Activity
	September 1, 2025 and September 1, 2026	**Construction Progress Report** By seven (7) and eight (8) years after the effective date of the final permit, the permittee must provide the EPA and IDEQ with brief progress reports of construction as they relate to meeting the compliance schedule timeline and final effluent limits. Deliverable: The permittee must submit the report to the EPA and IDEQ. The permittee may submit the report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartB_Construction_Progress_90408, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2027	**Construction Complete** By nine (9) years after the effective date of the final permit, the permittee must provide the EPA and IDEQ with written notice that construction on the portions of the facility required to achieve final effluent limits has reached substantial completion. Deliverable: The permittee must provide written notice to the EPA and IDEQ that construction is substantially complete. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartB_Construction_Complete_43699, where YYYY_MM_DD is the date that the permittee submits the written notification.
	September 1, 2028	**Final Ammonia Limits Achieved** By ten (10) years after the effective date of the final permit, the permittee must provide the EPA and IDEQ with a written report providing details of a completed start-up and optimization phase of the new or upgraded treatment system and must achieve compliance with the final effluent limitations of Part I.B. Deliverable: The permittee must submit the report to the EPA and IDEQ. The permittee may submit the report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ ID0021997_PartB_Final_90408, where YYYY_MM_DD is the date that the permittee submits the written notification.

D. Phosphorus Reduction Study

The Permittee must complete a report that examines how to improve effluent quality associated with phosphorus. The study must evaluate current facility operations to achieve improvements in nutrient removal using existing infrastructure and analyze other cost-effective methods of reducing phosphorus loads. Within three years of the effective date of this permit, the permittee must submit the study results to the EPA and IDEQ.

The Permittee must submit the study results as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_Optimize, where YYYY_MM_DD is the date that the permittee submits the study results. The study must be retained on site and made available to the EPA and/or IDEQ upon request.

E. Industrial Waste Management

1. The Permittee must not authorize the introduction of pollutants that would inhibit, interfere, or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.

2. The Permittee must not authorize, under any circumstances, the introduction of the following pollutants to the POTW from any source of nondomestic discharge:
   a) Any pollutant which may cause Pass Through or Interference;
   b) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 60°C (140°F) using the test methods specified in 40 CFR 261.21;
   c) Pollutants which will cause corrosive structural damage to the POTW, but in no case indirect discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such indirect discharges;
   d) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW;
   e) Any pollutant, including oxygen demanding pollutants (e.g., BOD_5), released in an indirect discharge at a flow rate and/or pollutant concentration which will cause Interference with any treatment process at the POTW;
   f) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40° C (104° F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
   g) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through at the POTW;
   h) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
   i) Any trucked or hauled pollutants, except at discharge points designated by the POTW
   j) Any specific pollutant which exceeds a local limitation established by the Permittee in accordance with the requirements of 40 CFR 403.5(c) and (d).
3. The Permittee must develop and maintain a master list of the industrial users introducing pollutants to the POTW. Industrial user means any source of indirect discharge from a non-domestic source. This list must identify:
   a) Names and addresses of all industrial users;
   b) Which industrial users are significant industrial users (SIUs) (see Paragraph 5 of this Part);
   c) Which SIUs are subject to categorical Pretreatment Standards (see 40 CFR 405-471);
   d) Which standards are applicable to each industrial user (if any);
   e) Which industrial users are subject to local standards that are more stringent than the categorical Pretreatment Standards; and

f) Which industrial users are subject only to local requirements.

4. The Permittee must submit this list, along with a summary description of the sources and information gathering methods used to develop this list, to the EPA within two years following the effective date of the NPDES permit. The permittee may submit the list as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_Industrial User_12099, where YYYY_MM_DD is the date that the permittee submits the written notification.

5. For the purposes of this list development, the term SIU means:

   a) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and

   b) Any other industrial user that:

      (i) discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

      (ii) contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or

      (iii) is designated as such by the EPA or the Permittee on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violation any Pretreatment Standard or requirement in accordance with 40 CFR 403.8(f)(6).

F. Emergency Response and Public Notification Plan

1. The permittee must develop and implement an overflow emergency response and public notification plan that identifies measures to protect public health from overflows that may endanger health and unanticipated bypasses or upsets that exceed any effluent limitation in the permit. At a minimum the plan must include mechanisms to:

   a) Ensure that the permittee is aware (to the greatest extent possible) of all overflows from portions of the collection system over which the permittee has ownership or operational control and unanticipated bypass or upset that exceed any effluent limitation in the permit;

   b) Ensure appropriate responses including assurance that reports of an overflow or of an unanticipated bypass or upset that exceed any effluent limitation in the permit are immediately dispatched to appropriate personnel for investigation and response;

   c) Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;

d) Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained; and

e) Provide emergency operations.

2. The permittee must submit written notice to the EPA and IDEQ that the plan has been developed and implemented within one year of the effective date of this permit. Any existing emergency response and public notification plan may be modified for compliance with this section.

3. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_ERPNP, where YYYY_MM_DD is the date that the permittee submits the written notification.

III. Monitoring, Recording and Reporting Requirements

A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample.

The permittee must analyze the additional samples for those parameters limited in Part I.B of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with Part III.C of this permit, *Monitoring Procedures*. The permittee must report all additional monitoring in accordance with Part III.D of this permit, *Additional Monitoring by Permittee*.

B. Reporting of Monitoring Results

The permittee must submit monitoring data and other reports electronically using NetDMR.

1. Monitoring data must be submitted electronically to the EPA no later than the 20th of the month following the completed reporting period.

2. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E, of this permit Signatory Requirements.

3. The permittee must submit copies of the DMRs and other reports to IDEQ.

4. Submittal of Reports as NetDMR Attachments. Unless otherwise specified in this permit, the permittee may submit all reports to the EPA and IDEQ as NetDMR attachments rather than as hard copies. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ID0021997_Report Type

Name_Identifying Code, where YYYY_MM_DD is the date that the permittee submits the attachment.

5. The permittee may use NetDMR after requesting and receiving permission from US EPA Region 10. NetDMR is accessed from: https://netdmr.epa.gov/netdmr/public/home.htm

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless another method is required under 40 CFR subchapters N or O, or other test procedures have been specified in this permit or approved by the EPA as an alternate test procedure under 40 CFR 136.5.

D. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

Upon request by the EPA, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents

Records of monitoring information must include:

1. the date, exact place, and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records

The permittee must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the EPA or IDEQ at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:

a) any noncompliance that may endanger health or the environment;

b) any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.F of this permit, *Bypass of Treatment Facilities*);

c) any upset that exceeds any effluent limitation in the permit (See Part IV.G of this permit, *Upset Conditions*); or

d) any violation of a maximum daily discharge limitation for applicable pollutants identified by footnote 4 of Table 1 of Part I.B.

e) any overflow prior to the treatment works over which the permittee has ownership or has operational control. An overflow is any spill, release or diversion of municipal sewage including:

(i) an overflow that results in a discharge to waters of the United States; and

(ii) an overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral) that does not reach waters of the United States.

2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under Paragraph 1 above. The written submission must contain:

a) a description of the noncompliance and its cause;

b) the period of noncompliance, including exact dates and times;

c) the estimated time noncompliance is expected to continue if it has not been corrected; and

d) steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

e) if the noncompliance involves an overflow, the written submission must contain:

(i) The location of the overflow;

(ii) The receiving water (if there is one);

(iii) An estimate of the volume of the overflow;

(iv) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);

(v) The estimated date and time when the overflow began and stopped or will be stopped;

(vi) The cause or suspected cause of the overflow;

(vii) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;

(viii) An estimate of the number of persons who came into contact with wastewater from the overflow; and

(ix) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.

3. The Director of the Enforcement and Compliance Assurance Division may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.

4. Reports must be submitted in paper form. The permittee must sign and certify the report in accordance with the requirements of Part V.E, of this permit *Signatory Requirements.* The permittee must submit the legible originals of these documents to the Director, Enforcement and Compliance Assurance Division, with copies to IDEQ at the following addresses:

US EPA Region 10
Attn: ICIS Data Entry Team
1200 Sixth Avenue, Suite 155
MC: 20-CO4
Seattle, Washington 98101-3140

Idaho Department of Environmental Quality
Boise Regional Office
1445 N. Orchard
Boise, ID 83706

H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B of this permit, *Reporting of Monitoring Results* are submitted. The reports must contain the information listed in Paragraph III.G.2 of this permit.

I. Public Notification

The permittee must immediately notify the public, health agencies and other affected entities (e.g., public water systems) of any overflow which the permittee owns or has operational control; or any unanticipated bypass or upset that exceeds any effluent limitation in the permit in accordance with the notification procedures developed in accordance with Part II.F of this permit.

J. Notice of New Introduction of Toxic Pollutants

The permittee must notify the Director of the Water Division and IDEQ in writing of:

1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and

2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
3. For the purposes of this section, adequate notice must include information on:
   a) The quality and quantity of effluent to be introduced into the POTW, and
   b) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
4. The permittee must notify the Director of the Water Division at the following address:

   US EPA Region 10
   Attn: NPDES Permits Unit Manager
   1200 6th Avenue, Suite 155
   MC: 19-C04
   Seattle, WA 98101-3140

IV. Compliance Responsibilities

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

B. Penalties for Violations of Permit Conditions

1. Civil and Administrative Penalties. Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 USC § 2461 note) as amended by the Debt Collection Improvement Act (31 USC § 3701 note) (currently $52,414 per day for each violation).
2. Administrative Penalties. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR Part 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 USC § 2461 note) as amended by the Debt Collection Improvement Act (31 USC § 3701 note) (currently $20,965 per violation, with the maximum amount of any Class I penalty assessed not to exceed $52,414). Pursuant to 40 CFR Part 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section

309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 USC § 2461 note) as amended by the Debt Collection Improvement Act (31 USC § 3701 note) (currently $20,965 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $262,066).

3. Criminal Penalties:

   a) Negligent Violations. The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

   b) Knowing Violations. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

   c) Knowing Endangerment. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

   d) False Statements. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who

knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

C. Need To Halt or Reduce Activity not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

D. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs 2 and 3 of this Part.
2. Notice.
   a) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior written notice, if possible at least 10 days before the date of the bypass.
   b) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required under Part III.G of this permit, *Twenty-four Hour Notice of Noncompliance Reporting*.
3. Prohibition of bypass.
   a) Bypass is prohibited, and the Director of the Enforcement and Compliance Assurance Division may take enforcement action against the permittee for a bypass, unless:

(i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(iii) The permittee submitted notices as required under Paragraph 2 of this Part.

b) The Director of the Enforcement and Compliance Assurance Division may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Paragraph 3.a. of this Part.

G. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee meets the requirements of Paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   a) An upset occurred and that the permittee can identify the cause(s) of the upset;
   b) The permitted facility was at the time being properly operated;
   c) The permittee submitted notice of the upset as required under Part III.G of this permit, *Twenty-four Hour Notice of Noncompliance Reporting* and
   d) The permittee complied with any remedial measures required under Part IV.D of this permit, *Duty to Mitigate*.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

H. Toxic Pollutants

The permittee must comply with effluent standards or prohibitions established under Section 307(a) and with standards for sewage sludge use or disposal established under section 405(d) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

I. Planned Changes

The permittee must give written notice to the Director of the Water Division as specified in Paragraph III.J.4 of this permit, and IDEQ as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this permit.
3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application site.

J. Anticipated Noncompliance

The permittee must give written advance notice to the Director of the Enforcement and Compliance Assurance Division and IDEQ of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

K. Reopener

This permit may be reopened to include any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the Act. The Director may modify or revoke and reissue the permit if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

V. General Provisions

A. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. Duty to Reapply

If the permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. In accordance with 40 CFR 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Regional Administrator, the permittee must submit a new application at least 180 days before the expiration date of this permit.

C. Duty to Provide Information

The permittee must furnish to the EPA and IDEQ, within the time specified in the request, any information that the EPA or IDEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to the EPA or IDEQ, upon request, copies of records required to be kept by this permit.

D. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to the EPA or IDEQ, it must promptly submit the omitted facts or corrected information in writing.

E. Signatory Requirements

All applications, reports or information submitted to the EPA and IDEQ must be signed and certified as follows.

1. All permit applications must be signed as follows:
   a) For a corporation: by a responsible corporate officer.
   b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
   c) For a municipality, state, federal, Indian tribe, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the EPA or IDEQ must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   a) The authorization is made in writing by a person described above;
   b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
   c) The written authorization is submitted to the Director of the Enforcement and Compliance Assurance Division and IDEQ.
3. Changes to authorization. If an authorization under Paragraph 2 of this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Paragraph 2 of this Part must be submitted to the Director of the Enforcement and Compliance Assurance Division and IDEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this Part must make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

F. Availability of Reports

In accordance with 40 CFR Part 2, information submitted to the EPA pursuant to this permit may be claimed as confidential by the permittee. In accordance with the Act, permit applications, permits and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the EPA may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

G. Inspection and Entry

The permittee must allow the Director of the Enforcement and Compliance Assurance Division, EPA Region 10; IDEQ; or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

H. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of federal, tribal, state or local laws or regulations.

I. Transfers

This permit is not transferable to any person except after written notice to the Director of the Water Division as specified in Part III.J.4. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. (*See* 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

J. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

VI. Definitions

1. "Act" means the Clean Water Act.
2. "Administrator" means the Administrator of the EPA, or an authorized representative.
3. Approval Authority means the Administrator of the EPA, or an authorized representative.
4. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
5. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
6. "Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
7. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
8. "Composite" - see "24-hour composite".
9. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of

measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

10. "Director of the Enforcement and Compliance Assurance Division" means the Director of the Enforcement and Compliance Assurance Division, EPA Region 10, or an authorized representative.
11. "Director of the Water Division" means the Director of the Water Division, EPA Region 10, or an authorized representative.
12. "DMR" means discharge monitoring report.
13. "EPA" means the United States Environmental Protection Agency.
14. "Geometric Mean" means the n^{th} root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
15. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.
16. "IDEQ" means the Idaho Department of Environmental Quality.
17. "Indirect Discharge" means the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c) or (d) of the Act.
18. "Industrial User" means a source of "Indirect Discharge."
19. "Interference" means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both: 1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and 2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
20. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
21. "Method Detection Limit (MDL)" means the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.
22. "Minimum Level (ML)" means either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL). Minimum levels may be obtained in several ways: They may be published in a method; they may be sample concentrations equivalent to the lowest acceptable calibration point used by a laboratory; or they may be

calculated by multiplying the MDL in a method, or the MDL determined by a lab, by a factor.

23. "National Pollutant Discharge Elimination System (NPDES)" means, the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Act.
24. "Pass Through" means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
25. Receiving Water Concentration (RWC) is the concentration of a toxicant or effluent in the receiving water after mixing. The RWC is the inverse of the dilution factor. It is sometimes referred to as the instream waste concentration (IWC).
26. "QA/QC" means quality assurance/quality control.
27. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
28. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
29. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
30. "8-hour composite" sample means a combination of at least 3 discrete samples collected at equal time intervals from the same location, over an 8-hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

Appendix A
Minimum Levels

The Table below lists the maximum Minimum Level (ML) for pollutants not subject to concentration effluent limits in the permit. The permittee may request different MLs. The request must be in writing and must be approved by the EPA. If the Permittee is unable to obtain the required ML in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a ML to the EPA with appropriate laboratory documentation.

Pollutant & CAS No. (if available)	Minimum Level (ML) µg/L unless specified
Biochemical oxygen demand	2 mg/L
Chlorine, total residual (7782-50-5)	50.0
Dissolved oxygen	+/- 0.2 mg/L
Mercury, total (7439-97-6)	0.0005
Nitrate + nitrite nitrogen (as N)	100
Nitrogen, total Kjeldahl (as N) (7727-37-9)	300
Oil and grease (HEM) (hexane extractable material)	5,000
pH	N/A
Phosphorus, total (as P)	10
Soluble reactive phosphorus (as P)	10
Temperature	+/- 0.2° C
Total ammonia (as N) (7664-41-7)	50
Total dissolved solids	20 mg/L
Total suspended solids	5 mg/L